

Claims

1. Hot-melt pressure-sensitive adhesive based one or more non-thermoplastic elastomers, at least comprising
 100 parts by mass of the non-thermoplastic elastomer(s),
 from 1 to 200 parts by mass of one or more tackifying resins, and also
 one or more polyfunctional isocyanates which are free from blocking agent, the
 hot-melt pressure-sensitive adhesive comprising from 8 mmol to 5 mol of the
 reactive isocyanate groups of the isocyanate per kilogram of the non-
 thermoplastic elastomer(s) used.

2. Hot-melt pressure-sensitive adhesive according to Claim 1, characterized in that
 the non-thermoplastic elastomers are selected from the group consisting of
 natural rubbers, random-copolymerized styrene-butadiene rubbers (SBR),
 butadiene rubbers (BR), synthetic polyisoprenes (IR), butyl rubbers (IIR),
 halogenated butyl rubbers (XIIR), ethylene-vinyl acetate copolymers (EVA) and
 polyurethanes.

3. Hot-melt pressure-sensitive adhesive according to Claim 2, characterized in that it
 comprises a polymer blend of one or more of the non-thermoplastic elastomers
 and one or more thermoplastic elastomers selected from the group consisting of
 polypropylenes, polyethylenes, metallocene-catalysed polyolefins, polyesters,
 polystyrenes and synthetic block copolymer rubbers.

4. Hot-melt pressure-sensitive adhesive according to Claims 1 to 3, characterized in
 that the blocking-agent-free isocyanate comprises a mixture of different
 isocyanates which are distinguished by different reactivities.

5. Hot-melt pressure-sensitive adhesive according to Claims 1 to 4, characterized in
 that the crosslinking of the blocking-agent-free isocyanate is accelerated by
 means of a catalyst.

6. Hot-melt pressure-sensitive adhesive according to Claim 1 to 5, characterized in
 that fillers are added to the adhesive which are selected in particular from the
 group consisting of metal oxides, chalks, precipitated or pyrogenic silicas, solid or

hollow glass beads, microballoons, carbon blacks and/or glass fibres or polymer fibres.

Hot-melt pressure-sensitive adhesive according to at least one of the previous claims, characterized in that plasticizers are added to the adhesive which are selected in particular from the group consisting of paraffinic or naphthenic oils, oligomeric nitrile rubbers, liquid isoprene rubbers, oligobutadienes, soft resins, wool fats and/or rapeseed oils and castor oils.

10 8. Self-adhesive article obtained according to at least one of the preceding claims, characterized in that the hot-melt pressure-sensitive adhesive is applied to at least one side of a web-form material.

15 9. Self-adhesive article according to at least one of the previous claims, characterized in that the thickness of the hot-melt-pressure-sensitive adhesive on the web-form material is between 5 μm and 3000 μm , preferably between 15 μm and 150 μm .

20 10. Self-adhesive article according to at least one of the previous claims, characterized in that the hot-melt sensitive adhesive is applied in a thickness of from 20 μm to 3000 μm , in particular from 40 μm to 1500 μm , to a release paper having an anti-adhesive coating on both sides.

25 11. Process for producing self-adhesive articles, especially for producing high-performance self-adhesive articles such as tapes or labels, characterized in that the hot-melt pressure-sensitive adhesive is applied with the aid of a multi-roll applicator unit which comprises from two to five rolls.